REMARKS

No claims have been amended herein. After entry of this Letter To The Patent and Trademark Office claims 1-9, 12-21, and 24 will be pending in this case. Applicants respectfully request reconsideration and allowance of all pending claims.

A. Rejections under 35 U.S.C. §102

Reconsideration is respectfully requested of the rejection of claims 1-9, 12-21 and 24 under 35 U.S.C. §102(b) as being anticipated by WO 01/18310 (Kohler et al.). WO 01/18310 is not 35 U.S.C. §102(b) prior art because its publication date of March 15, 2001 is not more than one year before the instant application's filing date of December 31, 2001.

Claim 1 is directed to a process for manufacturing a cellulosic paper product and requires forming an aqueous suspension of papermaking fibers; depositing the aqueous suspension of papermaking fibers onto a sheet-forming fabric to form a wet web; dewatering the wet web to form a partially dewatered web; topically applying a glycol compound selected from a group consisting of polyethylene glycol, triethylene glycol, glycerol and mixtures thereof to the partially dewatered web having a fiber consistency of about 80% or less; and drying the partially dewatered web by passing heated air at a temperature of at least about 175°C through the web.

Kohler et al. disclose a process for improving the surface characteristics (e.g., strength, brightness and aging resistance) of a paper or board by applying an aqueous solution (L_w) of a surface-finishing active ingredient (W) to a hydrophilic paper or board sheet. The surface-finishing active ingredient includes polyethylene glycol (W₁) having an average molecular weight greater than 1500, and desirably from 1600 to 20,000, present in the solution at a concentration of up to 50% by weight, preferably from 0.1 to 20% by weight. The aqueous solution of polyethylene glycol maybe applied by spraying the aqueous solution onto the surface of the paper or board sheet to be treated in a section of the papermaking process in which the paper or board sheet has a moisture content of 40%, corresponding to a fiber consistency of 60% (See page 13, lines 12-15).

Further, the application rate of the solution is such that the concentration of the polyethylene glycol based on the dry substrate is in the range of from 0.005 g/m² to 5 g/m². The treated paper or board can be dried using drying rolls and drying roll batteries and, if desired, calendars and calendar batteries in the dry end, using drying temperature conditions which are conventional, such as 100-250°C under pressure.

Significantly, Kohler et al. do not disclose or suggest drying the web by passing heated air at a temperature of at least about 175°C through the treated web. As noted above, Kohler et al. simply disclose conventional drying methods that require drying rolls, drying roll batteries and, if desired, calendars and calendar batteries. The suitable temperature range is 100-250°C under smoothing and roll pressure, in particular nip pressure and line pressure. There is simply no disclosure of passing heated air at a temperature of at least about 175°C through the treated web for drying.

To satisfy *prima facie* anticipation, a reference must teach, expressly or inherently, each and every element required by claim 1 as interpreted by one of ordinary skill in the art.¹ Because Kohler et al. fail to disclose each and every element of claim 1, and in particular the passing of heated air at a temperature of at least about 175°C through the treated web for drying, claim 1 is novel over Kohler et al.

Claims 2-9 and 12 depend directly or indirectly from claim 1 and are patentable for the same reasons as claim 1, as well as for the additional elements they require.

Independent claim 13 is directed to a process for manufacturing a cellulosic paper product and requires forming an aqueous suspension of papermaking fibers; depositing the aqueous suspension of papermaking fibers onto a sheet-forming fabric to form a wet web; dewatering the wet web to produce a partially dewatered web having a fiber consistency of about 80% or

¹ W.L. Gore & Associates v. Garlock, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) (stating that "anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration"); M.P.E.P. § 2131.

less; topically applying a glycol compound selected from the group consisting of polyethylene glycol, triethylene glycol, glycerol and mixtures thereof to the partially dewatered web in an add-on amount ranging from about 0.5% to about 20% by weight of said papermaking fibers in said web; and drying the partially dewatered web. Unlike claim 1, claim 13 does not require through-air drying by passing heated air at a temperature of at least about 175°C through the web. However, claim 13 includes the further limitation that the glycol compound be applied to the partially dewatered web in an add-on amount ranging from about 0.5% to about 20% by weight of papermaking fibers in the web.

Significantly, Kohler et al. fail to teach the addition of polyethylene glycol to a partially dewatered web in an add-on amount ranging from about 0.5% to about 20% by weight of papermaking fibers in the web as required in claim 13. On page 2 of the Office action, the Examiner states that Kohler et al. disclose adding polyethylene glycol in amounts ranging from about 0.3% (referring to Example 2 at page 21 of Kohler et al.) to about 14% (referring to Example 1 at page 19 of Kohler et al.). The 0.3% polyethylene glycol added in Example 2 relied on by the Examiner is based on the weight of fiber material (See page 21, line 8-9), the same basis used in claim 13. However, the upper end of the range of 14% from Example 1 relied on by the Examiner is clearly described as the moistening of the paper as a result of spraying the aqueous solution (Solution I) containing polyethylene glycol and water (See page 19, line 18), and not the amount of polyethylene glycol alone. At page 20, line 2, Kohler et al. teach that the moistening of 14% relied on by the Examiner corresponds to an application of polyethylene glycol of 0.2% by weight based on the fiber material. This correspondence is calculated by multiplying the application rate of Solution I (1.12 g/m²) by the weight concentration of polyethylene glycol in Solution I (10%) and dividing by the basis weight of the paper (56 g/m²). Similarly, none of the remaining Examples 3-8 discloses addition of polyethylene glycol in an amount greater than 0.3% by weight based on the fiber material. For example, Example 8 includes polyethylene glycol addition of 0.15% by weight of fiber material. (See page 25, lines 3-4). Example 9 does not disclose the addition of polyethylene

glycol in terms of the fiber material and fails to disclose information sufficient to make such a calculation. Thus, Kohler et al. fail to teach or suggest limitations of claim 13, including topically applying a glycol compound to a partially dewatered web having a fiber consistency of about 80% or less and applying the glycol compound in an add-on amount of from about 0.5% to about 20% by weight of the papermaking fibers in the web.

Claims 14-21 and 24 depend directly or indirectly from claim 13 and are patentable for the same reasons as claim 13 set forth above, as well as for the additional elements they require.

CONCLUSION

Favorable reconsideration and allowance of all pending claims are respectfully solicited.

The Commissioner is requested to charge any fee deficiency in connection with this amendment to Deposit Account No. 19-1345.

Respectfully Submitted,

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